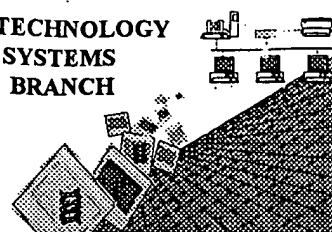


BIOTECHNOLOGY  
SYSTEMS  
BRANCH



**RAW SEQUENCE LISTING**  
**ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/019,566

Source: PT/110

Date Processed by STIC: 10/16/2003

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to (EFFECTIVE 12/01/2003):  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,  
2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office,  
Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/2003

## Raw Sequence Listing Error Summary

### ERROR DETECTED

### SUGGESTED CORRECTION

SERIAL NUMBER: 10/019,566

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 ☒ **Wrapped Nucleics  
Wrapped Aminos** The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 ☐ **Invalid Line Length** The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 ☒ **Misaligned Amino  
Numbering** The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 ☐ **Non-ASCII** The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 ☐ **Variable Length** Sequence(s) \_\_\_\_\_ contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 ☐ **PatentIn 2.0  
"bug"** A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) \_\_\_\_\_. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**
- 7 ☐ **Skipped Sequences  
(OLD RULES)** Sequence(s) \_\_\_\_\_ missing. If intentional, please insert the following lines for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
This sequence is intentionally skipped  
  
Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 ☐ **Skipped Sequences  
(NEW RULES)** Sequence(s) \_\_\_\_\_ missing. If intentional, please insert the following lines for each skipped sequence.  
<210> sequence id number  
<400> sequence id number  
000
- 9 ☐ **Use of n's or Xaa's  
(NEW RULES)** Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 ☐ **Invalid <213>  
Response** Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 ☐ **Use of <220>** Sequence(s) \_\_\_\_\_ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 00701/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 ☐ **PatentIn 2.0  
"bug"** Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 ☐ **Misuse of n/Xaa** "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



I

## RAW SEQUENCE LISTING

DATE: 10/16/2003

PATENT APPLICATION: US/10/019,566

TIME: 11:14:05

Input Set : A:\pto.ln.txt

Output Set: N:\CRF4\10162003\J019566.raw

3 <110> APPLICANT: Got-A-Gene AB  
 5 <120> TITLE OF INVENTION: Recombinant adenovirus  
 7 <130> FILE REFERENCE: 2001575  
 > 9 <140> CURRENT APPLICATION NUMBER: US/10/019,566  
 > 9 <141> CURRENT FILING DATE: 2003-09-25  
 9 <160> NUMBER OF SEQ ID NOS: 16  
 11 <170> SOFTWARE: MS Word 97

## ORDERED SEQUENCES

**Does Not Comply**  
**Corrected Diskette Needed**

13 <210> SEQ ID NO: 1  
 15 <211> LENGTH: 36  
 17 <212> TYPE: PRT  
 19 <213> ORGANISM: Homo sapiens  
 21 <301> AUTHORS: Hoppe HJ, Barlow PN, Reid KBM  
 23 <302> TITLE: A parallel three stranded a-helical bundle at the nucleation site of  
 24 collagen triple-helix formation  
 26 <303> JOURNAL: FEBS Letters  
 28 <304> VOLUME: 344  
 30 <306> PAGES: 191-195  
 32 <307> DATE: 1994  
 34 <400> SEQUENCE: 1  
 36 Pro Asp Val Ala Ser Leu Arg Gln Gln Val Glu Asp Leu Gln Gly  
 > 37 1 5  
 > 38 15  
 > 40 Gln Val Gln His Leu Gln Ala Ala Phe Ser Gln Tyr Lys Lys Val  
 > 41 20 Invalid 25 30  
 43 Glu Leu Phe Pro Asn Gly  
 > 44 35  
 50 <210> SEQ ID NO: 2  
 52 <211> LENGTH: 31  
 54 <212> TYPE: PRT  
 56 <213> ORGANISM: Homo sapiens  
 58 <301> AUTHORS: Harbury PB, Zhang T, Kim PS, Albert T  
 60 <302> TITLE: A switch between two-, three-, and four-stranded coiled coils in GCN4  
 61 leucine zipper mutants  
 63 <303> JOURNAL: Science  
 65 <304> VOLUME: 262  
 67 <306> PAGES: 1401-1407  
 69 <307> DATE: 1993-11-26  
 71 <400> SEQUENCE: 2  
 73 Met Lys Gln Ile Gly Asp Lys Ile Glu Glu Ile Leu Ser Lys Ile Tyr His

10 - See item 3  
 on error  
 summary report

## RAW SEQUENCE LISTING

DATE: 10/16/2003

PATENT APPLICATION: US/10/019,566

TIME: 11:14:05

Input Set : A:\pto.ln.txt

Output Set: N:\CRF4\10162003\J019566.raw

> 74 <sup>1</sup> <sup>5</sup> <sup>10</sup> same error  
 > 75 <sup>15</sup>  
 77 Ile Glu Asn Gly Ile Ala Arg Ile Lys Lys Leu Ile Gly Glu  
 > 78 20 25 30  
 83 <210> SEQ ID NO: 3  
 85 <211> LENGTH: 6  
 87 <212> TYPE: PRT  
 89 <213> ORGANISM: Pseudomonas aeruginosa  
 91 <301> AUTHORS: Brinkmann U, Buchner J, Pastan I  
 93 <302> TITLE: Independent domain folding of Pseudomonas exotoxin and single chain  
 94 immunotoxins: Influence of interdomain connections  
 96 <303> JOURNAL: Proc Natl Acad Sci US  
 98 <304> VOLUME: 89  
 100 <306> PAGES: 3075-3079  
 102 <307> DATE: 1992  
 104 <400> SEQUENCE: 3  
 106 Ala Ser Gly Gly Pro Glu  
 > 108 5  
 114 <210> SEQ ID NO: 4  
 116 <211> LENGTH: 7  
 118 <212> TYPE: PRT  
 120 <213> ORGANISM: Homo sapiens  
 122 <301> AUTHORS: Brinkmann U, Buchner J, Pastan I  
 124 <302> TITLE: Independent domain folding of Pseudomonas exotoxin and single chain  
 125 immunotoxins: Influence of interdomain connections  
 127 <303> JOURNAL: Proc Natl Acad Sci US  
 129 <304> VOLUME: 89  
 131 <306> PAGES: 3075-3079  
 133 <307> DATE: 1992  
 > 135 <400> SEQUENCE: Ala Ser Glu Gly Asn Ser Asp  
 > 136 <sup>1</sup> <sup>5</sup> same error  
 142 <210> SEQ ID NO: 5  
 144 <211> LENGTH: 8  
 146 <212> TYPE: PRT  
 148 <213> ORGANISM: Mus musculus  
 150 <301> AUTHORS: Brinkmann U, Buchner J, Pastan I  
 152 <302> TITLE: Independent domain folding of Pseudomonas exotoxin and single chain  
 153 immunotoxins: Influence of interdomain connections  
 155 <303> JOURNAL: Proc Natl Acad Sci US  
 157 <304> VOLUME: 89  
 159 <306> PAGES: 3075-3079  
 161 <307> DATE: 1992  
 163 <400> SEQUENCE: 5  
 165 Ala Ser Thr Pro Glu Pro Asp Pro  
 > 166 1 <sup>5</sup> same error  
 172 <210> SEQ ID NO: 6  
 174 <211> LENGTH: 13  
 176 <212> TYPE: PRT  
 178 <213> ORGANISM: Staphylococcus aureus

## RAW SEQUENCE LISTING

DATE: 10/16/2003

PATENT APPLICATION: US/10/019,566

TIME: 11:14:05

Input Set : A:\pto.ln.txt

Output Set: N:\CRF4\10162003\J019566.raw

```

180 <400> SEQUENCE: 6
182   Ala Lys Lys Leu Asn Asp Ala Gln Ala Pro Lys Ser Asp
> 183   1   5   10   same error
190 <210> SEQ ID NO: 7
192 <211> LENGTH: 11
194 <212> TYPE: PRT
196 <213> ORGANISM: Homo sapiens
198 <301> AUTHORS: Dangl JL, Wensel TG, Morrison SL, Streyer L, Herzenberg LA and Oi T
200 <302> TITLE: Segmental flexibility and complement fixation of genetically engineered
201   chimeric human, rabbit and mouse antibodies
203 <303> JOURNAL: EMBO Journal
205 <304> VOLUME: 7
207 <306> PAGES: 1989
209 <307> DATE: 1988
211 <400> SEQUENCE: 7
213   Thr Pro Leu Gly Asp Thr Thr His Thr Ser Gly
> 214   1   5   10
221 <210> SEQ ID NO: 8
223 <211> LENGTH: 11
225 <212> TYPE: PRT
227 <213> ORGANISM: Adenovirus type 5
229 <301> AUTHORS: Stouten PFW, Sander C, Ruigrok WH, Cusack S
231 <302> TITLE: New triple-helical model for the shaft of the adenovirus fibre
233 <303> JOURNAL: Journal of molecular biology
235 <304> VOLUME: 226
237 <306> PAGES: 1073-1084
239 <307> DATE: 1992
241 <400> SEQUENCE: 8
243   Phe Thr Ala Ser Asn Asn Ser Lys Lys Leu Glu
> 244   1   5   10
249 <210> SEQ ID NO: 9
251 <211> LENGTH: 8
253 <212> TYPE: PRT
255 <213> ORGANISM: Simian virus 40
257 <301> AUTHORS: Fisher-Fantuzzi L and Vesco C 8:5495-5503, 1988
259 <302> TITLE: Cell-Dependent Efficiency of Reiterated Nuclear Signals in a Mutant Simian
260   Virus 40 Oncoprotein Targeted to the Nucleus
262 <303> JOURNAL: Molecular Cell Biology
264 <304> VOLUME: 8
266 <306> PAGES: 5495-5503
268 <307> DATE: 1992
270 <400> SEQUENCE: 9
272   Asp Pro Lys Lys Lys Arg Lys Val
> 273   1   5
280 <210> SEQ ID NO: 10
282 <211> LENGTH: 119
284 <212> TYPE: PRT
286 <213> ORGANISM: Homo sapiens
288 <400> SEQUENCE: 10

```

## RAW SEQUENCE LISTING

DATE: 10/16/2003

PATENT APPLICATION: US/10/019,566

TIME: 11:14:05

Input Set : A:\pto.ln.txt

Output Set: N:\CRF4\10162003\J019566.raw

```

290 Gln Lys Val Thr Gln Ala Gln Thr Glu Ile Ser Val Val Glu Lys Glu
> 291 1 5 10 15 Invalid
> 292 Asp Val Thr Leu Asp Cys Val Tyr Glu Thre Arg Asp Thr Thr Tyr
> 293 20 25 30
294 Tyr Leu Phe Trp Tyr Lys Gln Pro Pro Ser Gly Glu Leu Val Phe Leu Ile
> 295 35 40 45
296 Arg Arg Asn Ser Phe Asp Glu Gln Asn Glu Ile Ser Gly Arg Tyr Ser
> 297 50 55 60 65
298 Trp Asn Phe Gln Lys Ser Thr Ser Ser Phe Asn Phe Thr Ile Thr Ala
> 299 70 75 80
300 Ser Gln Val Val Asp Ser Ala Val Tyr Phe Cys Ala Leu Gly Gly Val
> 301 85 90 95
302 Asn Asn Asn Ala Gly Asn Met Leu Thr Phe Gly Gly Gly Thr Arg
> 303 100 105 110
304 Leu Met Val Lys Pro
> 305 115
309 <210> SEQ ID NO: 11
311 <211> LENGTH: 133
313 <212> TYPE: PRT
315 <213> ORGANISM: Homo sapiens
317 <400> SEQUENCE: 11
319 Glu Asp Leu Asn Lys Val Phe Pro Pro Glu Val Ala Val Phe Glu
> 320 1 5 10
> 321 15
> 322 Pro Ser Glu Ala Glu Ile Ser His Thr Gln Lys Ala Thre Leu Val Cys
> 323 20 25 30
324 Leu Ala Thr Gly Phe Phe Pro Asp His Val Glu Lys Ser Trp Trp
> 325 35 40 45
> 326 Val Asn Gly Lys Glu Val His Ser Gly Val Set Thr Asp Pro Gln Pro
> 327 50 55 60
328 Leu Lys Glu Gln Pro Ala Leu Asn Asp Ser Arg Tyr Cys Leu Ser Ser
> 329 65 70 75
330 Arg Leu Arg Val Ser Ala Thr Phe Trp Gln Asn Pro Arg Asn His Phe
> 331 80 85 90
332 Arg Cys Gln Val Gln Phe Tyr Gly Leu Ser Glu Asn Asp Glu Trp Thr
> 333 95 100 105
> 334 110
335 Gln Asp Arg Ala Lys Pro Val Thr Gln Ile Val Ser Ala Glu Ala Trp Gly
> 336 115 120 125
338 Arg Ala Asp Ala Ala Ala
> 339 130
344 <210> SEQ ID NO: 12
346 <211> LENGTH: 114
348 <212> TYPE: PRT
350 <213> ORGANISM: Homo sapiens
352 <400> SEQUENCE: 12
354 Asp Ser Gly Val Thr Gln Thr Pro Lys His Leu Ile Thr Ala Thr Gly
> 355 1 5 10 15
356 Gln Arg Val Thr Leu Arg Cys Ser Pro Arg Ser Gly Asp Leu Ser Val

```

Same  
error

Invalid

Invalid

## RAW SEQUENCE LISTING

DATE: 10/16/2003

PATENT APPLICATION: US/10/019,566

TIME: 11:14:05

Input Set : A:\pto.ln.txt

Output Set: N:\CRF4\10162003\J019566.raw

```

> 357      20      25      30
358 Tyr Trp Tyr Gln Gln Ser Leu Asp Gln Gly Leu Gln Phe Leu Ile His
> 359      35      40      45
360 Tyr Tyr Asn Gly Glu Glu Arg Ala Lys Gly Asn Ile Leu Glu Arg Phe
> 361      50      55      60      65
362 Ser Ala Gln Gln Phe Pro Asp Leu His Ser Glu Leu Asn Leu Ser Ser
> 363      70      75      80
364 Leu Glu Leu Gly Asp Ser Ala Leu Val Phe Cys Ala Ser Asn Ile Ala
> 365      85      90      95
366 Gly Gly Ser Tyr Thr Gln Tyr Phe Gly Pro Gly Thr Arg Leu Thr Val
> 367      100      105
> 368 110
> 369 Leu eg. Leu 110
375 <210> SEQ ID NO: 13
377 <211> LENGTH: 52
379 <212> TYPE: DNA
381 <213> ORGANISM: Artificial sequence
> 382 <220> FEATURE:
382 <223> OTHER INFORMATION: Sequence replacing the fiber gene sequence which was deleted
ween the
383 NdeI restriction site in the fiber tail and the MunI site which begins at base
384 38 after the stop codon in the fiber. The sequence restores the NdeI and MunI
385 sites and the wild type genome sequence between the fiber stop codon and the
> 386 MunI site. In addition the added sequence contains an XhoI site allowing for the
> 387 ligation of recombinant fibers.
> 389 <400> SEQUENCE: 13
> 391 tatgcactcg agtaaagaat cgtttgtgtt atgtttcaac gtgtttatttt tc
397 <210> SEQ ID NO: 14
399 <211> LENGTH: 1746
401 <212> TYPE: DNA
403 <213> ORGANISM: Human adenovirus type 5
405 <221> NAME/KEY: CDS
407 <222> LOCATION: 1-1746
409 <223> OTHER INFORMATION: 1-129 Fiber tail
410 130-1200 Fiber shaft
411 1201-1746 Fiber knob
> 413 <400> SEQUENCE: 14
> 415 atg aag cgc gca aga ccg tct gaa gat acc ttc aac ccc gtg tat cca
416 48
417 Met Lys Arg Ala Arg Pro Ser Glu Asp Thr Phe Asn Pro Val Tyr Pro
> 418      1      5      10
> 419 15
> 420 tat gac acg gaa acc ggt cct cca act gtg cct ttt ctt act cct ccc
421 96
422 Tyr Asp Thr Glu Thr Gly Pro Pro Thr Val Pro Phe Leu Thr Pro Pro
> 423      20      25      30
> 424 ttt gta tcc ccc aat ggg ttt caa gag agt ccc cct ggg gta ctc tct
425 144
426 Phe Val Ser Pro Asn Gly Phe Gln Glu Ser Pro Pro Gly Val Leu Ser
> 427      35      40      45

```

same  
errorsee item 1 on error  
summary sheet.

## RAW SEQUENCE LISTING

DATE: 10/16/2003

PATENT APPLICATION: US/10/019,566

TIME: 11:14:05

Input Set : A:\pto.ln.txt

Output Set: N:\CRF4\10162003\J019566.raw

```

> 428 ttg   cgc cta   tcc   gaa cct   cta gtt acc tcc aat ggc atg ctt gcg ctc
429 192
430 Leu Arg Leu Ser Glu Pro Leu Val Thr Ser Asn Gly Met Leu Ala Leu
> 431           50           55           60
> 432 aaa atg ggc aac ggc ctc tct ctg   gac gag gcc ggc aac ctt acc tcc
433 240
434 Lys Met Gly Asn Gly Leu Ser Leu Asp Glu Ala Gly Asn Leu Thr Ser
> 435 65 70           75           80
> 436 caa aat   gta acc act   gtg agc cca cct ctc aaa aaa acc aag tca aac
437 288
438 Gln Asn Val Thr Thr Val Ser Pro Pro Leu Lys Lys Thr Lys Ser Asn
> 439 85 90           95
> 440 ata aac ctg   gaa ata tct   gca ccc ctc aca gtt acc tca gaa gcc cta
441 336
442 Ile Asn Leu Glu Ile Ser Ala Pro Leu Thr Val Thr Ser Glu Ala Leu
> 443 100 105 110
> 444 act gtg gct   gcc gcc gca cct   cta atg   gtc gcg ggc aac aca ctc acc
445 384
446 Thr Val Ala Ala Ala Ala Pro Leu Met Val Ala Gly Asn Thr Leu Thr
> 447 115           120           125
> 448 atg caa tca cag gcc ccg cta acc gtg cac gac tcc aaa ctt agc att
449 432
450 Met Gln Ser Gln Ala Pro Leu Thr Val His Asp Ser Lys Leu Ser Ile
> 451 130 135           140
> 452 gcc acc caa gga ccc ctc aca gtg tca gaa gga aag cta gcc ctg caa
453 480
454 Ala Thr Gln Gly Pro Leu Thr Val Ser Glu Gly Lys Leu Ala Leu Gln
> 455 145           150           155           160
> 456 aca tca ggc ccc ctc acc acc acc gat agc agt acc ctt act atc act
457 528
458 Thr Ser Gly Pro Leu Thr Thr Thr Asp Ser Ser Thr Leu Thr Ile Thr
> 459 165 170           175
> 460 gcc tca ccc cct cta act   act gcc act ggt agc ttg ggc att gac ttg
461 576
462 Ala Ser Pro Pro Leu Thr Thr Ala Thr Gly Ser Leu Gly Ile Asp Leu
> 463 180 185 190
> 464 aaa gag ccc att tat aca caa aat   gga aaa cta   gga cta aag tac ggg
465 624
466 Lys Glu Pro Ile Tyr Thr Gln Asn Gly Lys Leu Gly Leu Lys Tyr Gly
> 467 195 200 205
> 468 gct cct   ttg   cat gta aca gac gac cta aac act ttg   acc gta gca act
469 672
470 Ala Pro Leu His Val Thr Asp Asp Leu Asn Thr Leu Thr Val Ala Thr
> 471 210 215 220
> 472 ggt cca ggt gtg act att aat aat act tcc ttg   caa act   aaa gtt act
473 720
474 Gly Pro Gly Val Thr Ile Asn Asn Thr Ser Leu Gln Thr Lys Val Thr
> 475 225 230 235 240
> 476 gga gcc ttg   ggt ttt   gat   tca caa gcc aat atg caa ctt aat gta gca

```

Same error  
(item 1)



## RAW SEQUENCE LISTING

DATE: 10/16/2003

PATENT APPLICATION: US/10/019,566

TIME: 11:14:05

Input Set : A:\pto.ln.txt

Output Set: N:\CRF4\10162003\J019566.raw

```

477 768
478 Gly Ala Leu Gly Phe Asp Ser Gln Gly Asn Met Gln Leu Asn Val Ala
> 479 245 250 255
> 480 gga gga cta agg att gat tct caa aac aga cgc ctt ata ctt gat gtt
481 816
482 Gly Gly Leu Arg Ile Asp Ser Gln Asn Arg Arg Leu Ile Leu Asp Val
> 483 260 265 270
> 484 agt tat ccg ttt gat gct caa aac caa cta aat cta aga cta gga cag
485 864
486 Ser Tyr Pro Phe Asp Ala Gln Asn Gln Leu Asn Leu Arg Leu Gly Gln
> 487 275 280 285
> 488 ggc cct ctt ttt ata aac tca gcc cac aac ttg gat att aac tac aac
489 912
490 Gly Pro Leu Phe Ile Asn Ser Ala His Asn Leu Asp Ile Asn Tyr Asn
> 491 290 295 300
> 492 aaa ggc ctt tac ttg ttt aca gct tca aac aat tcc aaa aag ctt
493 gag 960
494 Lys Gly Leu Tyr Leu Phe Thr Ala Ser Asn Asn Ser Lys Lys Leu Glu
> 495 305 310 315 320
> 496 gtt aac cta agc act gcc aag ggg ttg atg ttt gac gct aca gcc ata
497 1008
498 Val Asn Leu Ser Thr Ala Lys Gly Leu Met Phe Asp Ala Thr Ala Ile
> 499 325 330 335
> 500 gcc att aat gca gga gat ggg ctt gaa ttt ggt tca cct aat gca cca
501 1056
502 Ala Ile Asn Ala Gly Asp Gly Leu Glu Phe Gly Ser Pro Asn Ala Pro
> 503 340 345 350
> 504 aac aca aat ccc ctc aaa aca aaa att ggc cat ggc cta gaa ttt gat
505 1104
506 Asn Thr Asn Pro Leu Lys Thr Lys Ile Gly His Gly Leu Glu Phe Asp
> 507 355 360 365
> 508 tca aac aag gct atg gtt cct aaa cta gga act ggc ctt agt ttt gac
509 1152
510 Ser Asn Lys Ala Met Val Pro Lys Leu Gly Thr Gly Leu Ser Phe Asp
> 511 370 375 380
> 512 agc aca ggt gcc att aca gta gga aac aaa aat aat gat aag cta act
513 1200
514 Ser Thr Gly Ala Ile Thr Val Gly Asn Lys Asn Asn Asp Lys Leu Thr
> 515 385 390 395 400
> 516 ttg tgg acc aca cca gct cca tct cct aac tgt aga cta aat gca gag
517 1248
518 Leu Trp Thr Thr Pro Ala Pro Ser Pro Asn Cys Arg Leu Asn Ala Glu
> 519 405 410 415
> 520 aaa gat gct aaa ctc act ttg gtc tta aca aaa tgt ggc agt caa ata
521 1296
522 Lys Asp Ala Lys Leu Thr Leu Val Leu Thr Lys Cys Gly Ser Gln Ile
> 523 420 425 430
> 524 ctt gct aca gtt tca gtt ttg gct gtt aaa ggc agt ttg gct cca ata
525 1344

```

same error

## RAW SEQUENCE LISTING

DATE: 10/16/2003

PATENT APPLICATION: US/10/019,566

TIME: 11:14:05

Input Set : A:\pto.ln.txt

Output Set: N:\CRF4\10162003\J019566.raw

```

526 Leu Ala Thr Val Ser Val Leu Ala Val Lys Gly Ser Leu Ala Pro Ile
> 527 435 440 445
> 528 tct gga aca gtt caa agt gct cat ctt att ata aga ttt gac gaa aat
529 1392
530 Ser Gly Thr Val Gln Ser Ala His Leu Ile Ile Arg Phe Asp Glu Asn
> 531 450 455 460
> 532 gga gtg cta cta aac aat tcc ttc ctg gac cca gaa tat tgg aac ttt
533 1440
534 Gly Val Leu Leu Asn Asn Ser Phe Leu Asp Pro Glu Tyr Trp Asn Phe
> 535 465 470 475 480
> 536 aga aat gga gat ctt act gaa ggc aca gcc tat aca aac ggt gtt gga
537 1488
538 Arg Asn Gly Asp Leu Thr Glu Gly Thr Ala Tyr Thr Asn Gly Val Gly
> 539 485 490 495
> 540 ttt atg cct aac cta tca gct tat cca aaa tct cac ggt aaa act gcc
541 1536
542 Phe Met Pro Asn Leu Ser Ala Tyr Pro Lys Ser His Gly Lys Thr Ala
> 543 500 505 510
> 544 aaa agt aac att gtc agt caa gtt tac tta aac gga gac aaa act aaa
545 1584
546 Lys Ser Asn Ile Val Ser Gln Val Tyr Leu Asn Gly Asp Lys Thr Lys
> 547 515 520 525
> 548 cct gta aca cta acc att aca cta aac ggt aca cag gaa aca gga gac
549 1632
550 Pro Val Thr Leu Thr Ile Thr Leu Asn Gly Thr Gln Glu Thr Gly Asp
> 551 530 535 540
> 552 aca act cca agt gca tac tct atg tca ttt tca tgg gac tgg tct ggc
553 1680
554 Thr Thr Pro Ser Ala Tyr Ser Met Ser Phe Ser Trp Asp Trp Ser Gly
> 555 545 550 555 560
> 556 cac aac tac att aat gaa ata ttt gcc aca tcc tct tac act ttt tca
557 1728
558 His Asn Tyr Ile Asn Glu Ile Phe Ala Thr Ser Ser Tyr Thr Phe Ser
> 559 565 570 575
> 560 tac att gcc caa gaa taa
561 Tyr Ile Ala Gln Glu ***
565 <210> SEQ ID NO: 15
567 <211> LENGTH: 120
569 <212> TYPE: PRT
571 <213> ORGANISM: Mus musculus
574 <400> SEQUENCE: 15
576 Asp Val Lys Leu Val Glu Ser Gly Gly Gly Leu Val Lys Leu Gly Gly
> 577 1 5 10
> 578 15
579 Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
> 580 20 25 30
581 Tyr Met Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Leu Val
> 582 35 40 45
583 Ala Ala Ile Asn Ser Asp Gly Gly Ile Thr Tyr Tyr Leu Asp Thr Val

```

same error

see item 3 on  
error summary  
sheet.

## RAW SEQUENCE LISTING

DATE: 10/16/2003

PATENT APPLICATION: US/10/019,566

TIME: 11:14:05

Input Set : A:\pto.ln.txt

Output Set: N:\CRF4\10162003\J019566.raw

```

> 584          50                      55
> 585 60
586   Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr
> 587          65                      70                      75
588   Leu Gln Met Ser Ser Leu Lys Ser Glu Asp Thr Ala Leu Phe Tyr Cys
> 589 80                      85                      90
> 590 95
591   Ala Arg His Arg Ser Gly Tyr Phe Ser Met Asp Tyr Trp Gly Gln Gly
> 592          100                      105
> 593 110
594   Thr Ser Val Thr Val Ser Ser Gly Ser
> 595          115
599 <210> SEQ ID NO: 16
601 <211> LENGTH: 116
603 <212> TYPE: PRT
605 <213> ORGANISM: Mus musculus
608 <400> SEQUENCE: 16
610   Asp Ile Val Met Thr Gln Ser Gln Arg Phe Met Ser Thr Thr Val Gly
> 611 1                      5                      10
> 612 15
613   Asp Arg Val Ser Ile Thr Cys Lys Ala Ser Gln Asn Val Val Ser Ala
> 614          20                      25
> 615 30
616   Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile
> 617          35                      40                      45
618   Tyr Ser Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly
> 619          50                      55
> 620 60
621   Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Asn Met Gln Ser
> 622 65                      70                      75
> 623 80
624   Glu Asp Leu Ala Asp Phe Phe Cys Gln Gln Tyr Ser Asn Tyr Pro Trp
> 625          85                      90
> 626 95
627   Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg Ala Asp Ala Ala
> 628          100                      105                      110
629   Pro Thr Val Ser
> 630          115
> 635 ??
> 643 1
> 644 Error! Main Document Only.

```

Same  
error

delete.

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/019,566

DATE: 10/16/2003  
TIME: 11:14:06

Input Set : A:\pto.ln.txt

Output Set: N:\CRF4\10162003\J019566.raw

Valid Line Length:

rules require that a line not exceed 72 characters in length. This includes spaces.

#:9; Line(s) 259

#:13; Line(s) 386

#:14; Line(s) 420,476,484,496,500,504,512,540,544,548

#:15; Line(s) 577

## VERIFICATION SUMMARY

DATE: 10/16/2003

PATENT APPLICATION: US/10/019,566

TIME: 11:14:06

Input Set : A:\pto.ln.txt

Output Set: N:\CRF4\10162003\J019566.raw

M:270 C: Current Application Number differs, Replaced Current Application No  
M:271 C: Current Filing Date differs, Replaced Current Filing Date  
7 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1  
32 Repeated in SeqNo=1  
0 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1  
4 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2  
32 Repeated in SeqNo=2  
08 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
35 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:4 differs:3  
36 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:0  
36 M:301 E: (44) No Sequence Data was Shown, SEQ ID:4  
36 M:252 E: No. of Seq. differs, <211> LENGTH:Input:7 Found:0 SEQ:4  
66 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5  
83 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:6  
14 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:7  
44 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:8  
73 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:9  
91 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:10  
92 M:333 E: Wrong sequence grouping, Amino acids not in groups!  
32 Repeated in SeqNo=10  
05 M:252 E: No. of Seq. differs, <211> LENGTH:Input:119 Found:116 SEQ:10  
20 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:11  
32 Repeated in SeqNo=11  
22 M:333 E: Wrong sequence grouping, Amino acids not in groups!  
26 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1  
55 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:12  
32 Repeated in SeqNo=12  
69 M:252 E: No. of Seq. differs, <211> LENGTH:Input:114 Found:113 SEQ:12  
82 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:13  
86 M:259 W: Allowed number of lines exceeded, <223> Other Information:  
87 M:259 W: Allowed number of lines exceeded, <223> Other Information:  
89 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:13  
91 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:53 SEQ:13  
91 M:252 E: No. of Seq. differs, <211> LENGTH:Input:52 Found:53 SEQ:13  
13 M:200 E: Mandatory Header Field missing, <220> Tag not found for SEQ ID#:14  
15 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:48 SEQ:14  
18 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
54 Repeated in SeqNo=14  
23 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
27 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
31 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
35 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
39 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
43 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
47 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
51 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
55 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
59 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14

## VERIFICATION SUMMARY

DATE: 10/16/2003

PATENT APPLICATION: US/10/019,566

TIME: 11:14:06

Input Set : A:\pto.ln.txt

Output Set: N:\CRF4\10162003\J019566.raw

63 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
67 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
71 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
75 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
79 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
83 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
87 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
91 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
95 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
99 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
03 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
07 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
11 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
15 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
19 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
23 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
27 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
31 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
35 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
39 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
43 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
47 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
51 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
55 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
59 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:14  
77 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:15  
32 Repeated in SeqNo=15  
95 M:252 E: No. of Seq. differs, <211> LENGTH:Input:120 Found:121 SEQ:15  
11 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16  
32 Repeated in SeqNo=16  
35 M:333 E: Wrong sequence grouping, Amino acids not in groups!  
35 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1  
44 M:333 E: Wrong sequence grouping, Amino acids not in groups!  
44 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:4  
44 M:252 E: No. of Seq. differs, <211> LENGTH:Input:116 Found:120 SEQ:16